

Application No. 10/465,789  
Amendment dated April 5, 2005  
Reply to Office Action of October 5, 2004

### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 21-25. Canceled.

26. (New) A method for cleavage of a double-stranded DNA molecule characterized by a distorted structure, wherein said distorted structure results from a Dewar isomer of 6-4 photoproduct, dihyrouracil, uracil, an abasic site, mismatched nucleotide pairing, a platinum-DNA GG diadduct, an insertion or deletion loop of less than five nucleotides, said method comprising the step of contacting a DNA molecule characterized by a distorted structure with a broadly specific DNA damage endonuclease selected from the group of endonucleases selected from the group consisting of a stable truncated Uve1p identified by the amino acid sequence as given in SEQ ID NO:4, wherein said Uve1p is at least 90% pure, and a fusion protein comprising a stable truncated Uve1p and a heterologous sequence, wherein said fusion protein is identified by the amino acid sequence given in SEQ ID NO:6, under conditions allowing for enzymatic activity of said endonuclease.
27. (New) The method of claim 26 wherein said truncated Uve1p is at least 90% pure and has the amino acid sequence given in SEQ ID NO:4.
28. (New) The method of claim 26 wherein said fusion protein has the amino acid sequence given in SEQ ID NO:6.